Radio Frequency Interference Scan

Applied Physics Department

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1 Scans

| SNo. | Project Name | Short Code | Date | Time |
|------|---------------------|------------|------------|-------|
| 1. | First Light | (FL) | 26-08-2019 | 13:33 |
| 2. | Second Thought | (ST) | 26-08-2019 | 18:42 |
| 3. | Third Bird | (THV) | 30-08-2019 | 18:00 |
| 4. | Fourth HomeRun | (FHR) | 31-08-2019 | 23:04 |
| 5. | Fifth Height | (FH) | 02-09-2019 | 07:47 |
| 6. | Sixth Kite | (SK) | 02-09-2019 | 08:29 |
| 7. | Seventh Path | (SP) | 03-09-2019 | 18:35 |
| 8. | $Eight\ Voyager(s)$ | (EV) | 03-09-2019 | 19:04 |
| 9. | Ninth Cloud | (NC) | 06-09-2019 | 17:38 |
| 10. | Tenth Wind | (TW) | 06-09-2019 | 23:41 |
| 11. | Eleventh Thunder | (ET) | 07-09-2019 | 02:53 |
| 12. | Twelfth Chandryaan | (TC) | 07-09-2019 | 04:28 |
| 13. | Thirteenth Clue | (ThC) | 07-09-2019 | 06:26 |

Table 1: List of Scans

Due to Software constraints, the first 3 Scans(i.e. First Light, SecondThought, ThirdBird) are taken with **no overlap and the acquired data is in logarithmic units**. Therefore data in them is only useful for a qualitative idea. The data acquired from the subsequent scans is **in liner units and with 1 MHz overlap.**

Note: The height in the plots is actually the height taken above the Noise Floor of the SDR.

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2 Results

RFI SCAN

| Scan | FL | ST | TBV | FHR | FH | SK | SP | EV | NC | TW | ET | TC | ThC | |
|-----------|-------|-------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Freq(MHz) | FL | 31 | IDV | гпк | FN | 31 | JP . | EV | INC | 1 00 | E1 | 10 | THC | COUNT |
| 81.23 | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | TRUE | 3 |
| 83.5 | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | 1 |
| 83.73 | FALSE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | 1 |
| 83.82 | TRUE | TRUE | TRUE | FALSE | 3 |
| 84.02 | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | 1 |
| 84.26 | FALSE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | 1 |
| 84.54 | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | 1 |
| 84.78 | FALSE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | 1 |
| 85.59 | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | 1 |
| 86.63 | TRUE | FALSE | TRUE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | 3 |
| 87.15 | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | 1 |
| 87.67 | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | 1 |
| 88.2 | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | 1 |
| 88.71 | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | 1 |
| 89.06 | FALSE | FALSE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | FALSE | FALSE | TRUE | 9 |
| 89.23 | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | 1 |
| 89.75 | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | 1 |
| 91.1 | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | FALSE | FALSE | TRUE | 11 |
| 91.9 | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | FALSE | 12 |
| 92.7 | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | FALSE | FALSE | TRUE | 11 |
| 93 | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | TRUE | TRUE | TRUE | TRUE | 5 |
| 93.91 | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | FALSE | TRUE | FALSE | 11 |
| 94.3 | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | 13 |
| 95 | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | 13 |
| 95.62 | TRUE | FALSE | FALSE | TRUE | FALSE | 2 |
| 96.93 | FALSE | FALSE | FALSE | FALSE | TRUE | TRUE | TRUE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | 4 |
| 98.31 | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | 13 |
| 99.1 | FALSE | FALSE | TRUE | TRUE | TRUE | TRUE | FALSE | TRUE | TRUE | FALSE | FALSE | FALSE | TRUE | 7 |
| 99.87 | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | 1 |
| 101.1 | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | FALSE | FALSE | FALSE | TRUE | 10 |
| 115.2 | TRUE | FALSE | FALSE | TRUE | TRUE | TRUE | FALSE | TRUE | TRUE | TRUE | FALSE | TRUE | TRUE | 9 |
| 120 | FALSE | FALSE | FALSE | FALSE | TRUE | 9 |
| 123.75 | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | FALSE | 1 |
| 124.85 | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | 2 |
| 132.7 | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | TRUE | 1 |
| 140.24 | TRUE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | 1 |
| 150.17 | TRUE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | 1 |
| 158.15 | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | FALSE | 1 |
| 159.1 | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | FALSE | 2 |
| 162.7 | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | FALSE | 1 |
| 168 | FALSE | FALSE | FALSE | FALSE | TRUE | TRUE | FALSE | 2 |
| 172.5 | TRUE | FALSE | FALSE | FALSE | TRUE | FALSE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | FALSE | 8 |
| 172.8 | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | 13 |
| 196.24 | TRUE | FALSE | FALSE | TRUE | FALSE | TRUE | 10 |
| 200.68 | FALSE | FALSE | TRUE | FALSE | 1 |
| 201.6 | TRUE | TRUE | FALSE | TRUE | 12 |
| 201.74 | TRUE | FALSE | FALSE | TRUE | FALSE | TRUE | 10 |
| 230 | TRUE | | True+0.4 | | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | 3 |
| 259.2 | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | FALSE | TRUE | FALSE | TRUE | 11 |
| 261.22 | TRUE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | 1 |
| 264 | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | FALSE | FALSE | FALSE | TRUE | TRUE | TRUE | TRUE | 10 |
| 264.83 | FALSE | FALSE | TRUE | FALSE | 1 |
| 279.22 | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | FALSE | TRUE | TRUE | TRUE | TRUE | TRUE | 12 |
| 280.48 | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | TRUE | FALSE | 3 |
| 282.83 | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | 13 |
| 288 | FALSE | FALSE | FALSE | TRUE | FALSE | 1 |
| 297.22 | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | 13 |
| | | | | | | | | | | | | | | |